FISHERY MANAGEMENT PLAN
FOR THE
TANNER CRAB COMMERCIAL FISHERY
IN THE BERING SEA DISTRICT, 2001

by

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ABSTRACT

This fishery management plan provides a brief overview of the Tanner crab *Chionoecetes bairdi* fishery, that occurs in the Bering Sea District of Tanner crab Registration Area J. An area description, brief historic fishery review, and summary of current management practices and policies are included to provide fishers and members of industry a better understanding of how the Alaska Department of Fish and Game (ADF&G) intends to manage the Tanner crab fishery in this area. Supplemental information is provided on gear requirements, registration, provisions on operation of other gear, inseason reporting, the onboard observer program, and the harvest strategy.

INTRODUCTION

The first reported catches of Tanner crabs *Chionoecetes bairdi* occurred in 1968 as incidental bycatch in the red king crab *Paralithodes camtschaticus* fishery in Bristol Bay. Since that time, the annual harvest has ranged from a high of 66.6 million pounds in the 1977/78 season to fishery closures in 1986 and 1987. Due to low stock abundance, the fishery has been closed since 1997. In March 1999, the stock was officially declared "overfished", triggering development of a rebuilding plan that was finalized and adopted by the North Pacific Fishery Management Council in October 1999 and approved by the Secretary of Commerce in June 2000.

Description of District and Statistical Areas

The fishery occurs in the Bering Sea District of Tanner crab Registration Area J, which includes all waters of the Bering Sea north of the latitude of Cape Sarichef at 54º 36' N lat., and east of the U.S.-Russia Convention Line of 1867, as described in 5 AAC 35.500 DESCRIPTION OF REGISTRATION AREA J on page 186 of the 2000-2002 Commercial Shellfish Fishing Regulations booklet (CSFRB). The Bering Sea District is divided into the Eastern and Western Subdistricts at 173º W long. (Figure 1).

The district is divided into statistical areas for catch reporting purposes. Each statistical area encompasses one degree of longitude by one-half degree of latitude (Figure 2). All commercial removals of Tanner crabs (including deadloss) are reported to ADF&G at the time of landing and on fishtickets in reference to these statistical areas.

Historical Fishery Perspective

The first directed landings of Tanner crabs were recorded in 1974. Harvest in the directed fishery peaked at 66.6 million pounds during the 1977/78 season. In the fall of 1978, National Marine Fisheries Service (NMFS) predicted sharp declines in Tanner crab abundance, beginning with the 1978/79 fishing season. Tanner crab stocks declined as anticipated, and by 1984, the commercial harvest fell to 1.2 million pounds. Further stock declines led to fishery closures during the 1986 and 1987 seasons (Table 1 and Figure 3).

In 1994, the guideline harvest level (GHL) for Tanner crabs in the Eastern Subdistrict, west of 163° W long., was 7.5 million pounds. The total Tanner crab harvest in 1994 was 7.8 million pounds. In 1995, the Tanner crab GHL in the Eastern Subdistrict, west of 163º W long., was 5.5 million pounds. The total Tanner crab commercial harvest in that year was 4.2 million pounds. The GHL for the 1996 Tanner crab fishery was 8.4 million pounds. However, because of poor fishing performance, the fishery was closed when only 1.8 million pounds were harvested, well before the GHL was reached (Table 1).

Results from the 1997 NMFS survey of the Eastern Bering Sea indicated significant declines in most segments of the Tanner crab population. This, along with poor fishery performance in the

1996 fishery, resulted in closure of the Bering Sea Tanner crab fishery for the 1997 season. Results from the 1998 and 1999 NMFS surveys indicated fluctuating levels of abundance for both large male and female crabs (Stevens et al. 1998 and 1999). The fishery remained closed in 1998 and 1999 because the population remained below levels necessary to allow a commercial harvest. However, pre-recruit male (110-137 mm) abundance increased by 20% in 1998 and by 22% in 1999, indicating moderate recruitment in the population. Results from the 2000 NMFS survey indicated the abundance of legal male (≥138 mm) crabs had increased to 4.9 million crabs, a 147% increase from the prior year, while pre-recruit males increased 24%. However, small male (<110 mm) crabs decreased by 46% from levels observed in 1999 (Stevens et al. 2000). Despite increases in some components of the population, the stock remained below the minimum stock size threshold (MSST); therefore, the commercial fishery did not open for the 2000 season.

REGULATIONS

Regulations that apply to the Bering Sea District Tanner crab fishery are set out in Title 5, Chapter 35 of the Alaska Administrative Code (AAC) starting on page 164 of the CSFRB. Some of the more pertinent regulations are summarized below. This section does not include all regulations pertaining to the Bering Sea District. Fishers may obtain a copy of the CSFRB (light blue in color for the 2000-2002 cycle) from any ADF&G office. For additional information on the Bering Sea Tanner crab fishery, contact the ADF&G office in Dutch Harbor or Kodiak.

Onboard Observer Program and Vessel Preseason Registration

In addition to the pay-as-you-go mandatory observer coverage on at-sea processors, new regulations allow for placement of observers on catcher vessels. These regulations are listed in 5 AAC 39.645 SHELLFISH ONBOARD OBSERVER PROGRAM, starting on page 53 of the CSFRB. ADF&G plans to place observers on approximately 10% of the catcher vessels that participate in the Bering Sea Tanner crab fishery. This observer coverage will be paid for with funds generated by cost-recovery fishing. However, observers will not be placed on vessels less than 75 feet overall length. Observers will have their own rain gear, boots, gloves, survival suit, and personal floatation device for working on deck, along with their own bedding and personal items. Some of the regulatory requirements for vessels that carry observers include:

- Provide adequate food and accommodations for the observer equal to those provided for the vessel's crew;
- Provide to the observer daily catch information, including areas fished, number of crabs retained, number of pots pulled, and other information specified by the department;
- Provide a safe work area and necessary gear, such as 2 to 3 totes the observer can use at all times to hold the contents of sampled crab pots;
- Assure observer access to single side band (SSB) radio, fax, telex, or telephone and that catch reports from observers are transmitted to the Dutch Harbor ADF&G office;
- Provide proof of compliance with United States Coast Guard (USCG) vessel safety requirements.

Based on the number of vessels registered, ADF&G will determine the number of observers needed and select catcher vessels for observer coverage. Therefore, vessels intending to participate in the Bering Sea Tanner crab fishery must file a preseason registration form with ADF&G in Dutch Harbor or Kodiak as specified in 5 AAC 35.506 AREA J REGISTRATION (e)(2) and (3) (pg. 188, CSFRB). The vessel operators must show proof that they have a current Commercial Fisheries Entry Commission (CFEC) interim use card for Bering Sea Tanner crab, or their preseason registration form must be imprinted with a CFEC card prior to submission to ADF&G. Vessels participating in the Bristol Bay red king crab (BBRKC) fishery that intend to retain Tanner crabs must also preregister for and have a valid CFEC permit for Bering Sea Tanner crab. Preseason vessel registrations may be submitted to ADF&G in Dutch Harbor or Kodiak, by fax, mail, or in person. **The preseason registration deadline for the Eastern Subdistrict Tanner crab fishery is 5:00 PM September 24 if Tanner crabs are allowed to be harvested during the BBRKC season and 5:00 PM October 10 if there is no BBRKC season and the Tanner crab season opens on November 1. For the Western Subdistrict Tanner crab fishery, the deadline is 5:00 PM December 24.**

Vessels are selected at random to carry an observer from those vessels that file a preseason registration form with ADF&G. Vessels selected to carry an observer will be announced by news release several days following the preseason registration deadline.

ADF&G will establish a web site for vessel operators and agents to verify that ADF&G has received their preseason vessel registrations. ADF&G will post names of vessels that file preseason registrations on the web site, usually within two days of receipt. All vessel operators or agents are urged to verify the vessel preseason registration. If a vessel name fails to appear on the web site list within several days after submission of a preseason registration, the vessel operator or agent should contact ADF&G in Dutch Harbor immediately.

The ADF&G web site for verification of vessel preseason registration will be announced by news release when it has been determined that a commercial Bering Sea Tanner crab fishery will occur.

American Fisheries Act Vessel Management Sideboards

Vessels that are endorsed under the American Fisheries Act (AFA) for the Bering Sea Tanner crab fishery will be managed as outlined in 5 AAC 39.695 AMERICAN FISHERIES ACT MANAGEMENT PLAN FOR THE BERING SEA AND BRISTOL BAY CRAB FISHERIES (pg. 59, CSFRB). Provisions of this management plan include preseason vessel registration, observer coverage as required by ADF&G, and other conditions that the Commissioner of ADF&G determines necessary for management of the fishery. This management plan also specifies that ADF&G will manage AFA vessels with a harvest cap equally apportioned among all AFA qualified vessels or through a cooperative fishery when 100% of AFA qualified participants agree to the cooperative. Also as specified in the management plan, each AFA vessel will be required to report via radio or marine telex to ADF&G as often as every 12 hours throughout the fishery.

Fishing Seasons

Regulations that address the opening and closure of the Tanner crab fishery in the Eastern Bering Sea are in 5 AAC 35.510 FISHING SEASONS FOR REGISTRATION AREA J (6)(B) (pg. 192, CSFRB). With the exception of the Norton Sound Section, the Eastern Subdistrict east of 168° W long. is opened and closed to fishing for Tanner crabs concurrent to the regulatory opening and emergency order closure of the Bristol Bay Registration Area T red king crab fishery. The BBRKC fishery opens annually at 4:00 PM on October 15, according to provisions of 5 AAC 34.810 (b) FISHING SEASONS FOR REGISTRATION AREA T. **Vessels that are participating in the BBRKC fishery and harvesting incidentally-caught Tanner crabs must abide by all regulations governing commercial king crab fishing in the BBRKC fishery, beginning with 5 ACC 34.800 DESCRIPTION OF REGISTRATION AREA T (pg. 149, CSFRB).**

If a harvestable surplus of Tanner crabs remains after the BBRKC fishery, the Tanner crab fishery will reopen in waters between 163° and 166° W long. 10 days following the closure of the BBRKC fishery and will close at noon on March 31 unless closed earlier by emergency order. If there is no BBRKC fishery, the season for Tanner crabs in waters between 163° and 166° W long. will open at noon on November 1 and close at noon on March 31 unless closed earlier by emergency order, which may be given on short notice.

If a harvestable surplus of Tanner crabs exists in waters west of 166° W long., Tanner crabs may be fished during the snow crab season, unless fishing is restricted by emergency order. If there is no snow crab season, the Tanner crab season in the Eastern Subdistrict, west of 166° W long. will open in conjunction with the opening of the Tanner crab fishery between 163° and 166° W long., which is either 10 days after closure of the BBRKC fishery or, if there is no red king crab season in Bristol Bay, on November 1. Figure 4 shows areas open to fishing for Tanner crabs in the Bering Sea District.

Pot Limits and Legal Gear

In 1992, in an effort to slow the harvest rate to allow sufficient time for inseason management of the Tanner crab fishery, the Alaska Board of Fisheries (BOF) adopted regulations that restricted all participating vessels to fishing a maximum of 250 pots. In 1993, to comply with federal law regarding application of pot limits in a nondiscriminatory manner, differential pot limits based on vessel length were implemented. The current pot limits specify a maximum of 200 pots for vessels 125 ft and less in overall length and a maximum of 250 pots for vessels over 125 ft overall length as described in 5 AAC 35.525 LAWFUL GEAR FOR REGISTRATION AREA J (c)(4) (pg. 195, CSFRB). Unlike the BBRKC fishery, pot limits in the directed Tanner crab fishery are not adjusted based on the GHL or altered by the number of vessels registered for the fishery.

Each pot in a vessel's legal complement of gear must have an identification tag on the main or trailer buoy as specified in 5 AAC 35.526 TANNER CRAB POT MARKING REQUIREMENTS FOR REGISTRATION AREA J (pg. 196, CSFRB). Buoy tags are available at the Dutch Harbor and Kodiak ADF&G offices for $2.00 each. Vessels are allowed to fish, as part of the total allowable number of pots, a maximum of 20 pots for Pacific cod *Gadus*

macrocephalus for use as bait. Pots used for Pacific cod fishing must conform to the regulations in 5 AAC 35.525 LAWFUL GEAR FOR REGISTRATION AREA J (d) (pp. 195-196, CSFRB). These pots must also be tagged with ADF&G issued buoy tags. Legal crabs captured in cod bait pots may be retained. All pots must be tagged at the time of tank inspection and remain tagged throughout the fishery. The vessel operator is responsible for all tagged gear and insuring that tags are affixed to gear in a way that minimizes tag loss.

Pots with lost tags must either be placed on deck or set back into the water with all bait and bait containers removed and all doors secured open. Fishers must IMMEDIATELY report to Fish and Wildlife Protection (FWP) the exact location of any pot that has lost the ADF&G issued buoy tag. Pots that are no longer tagged cannot be legally fished. Lost tags should be replaced as soon as possible. Buoy tags lost during the season are replaced according to provisions of 5 AAC 35.526 TANNER CRAB POT MARKING REQUIREMENTS FOR REGISTRATION AREA J (b) (pg. 196, CSFRB). Replacement tags are only issued if the vessel operator and three crewmembers submit sworn affidavits in person at the ADF&G office in Dutch Harbor, describing how the tags were lost and listing the number of each lost tag. To facilitate tag replacement for the Bering Sea snow crab fishery, ADF&G staff in the Pribilof Islands will, when available, accept and forward the required tag affidavits to the ADF&G office in Dutch Harbor for processing. It remains the responsibility of the vessel operator to arrange for payment and shipment of tags from Dutch Harbor.

For the Bering Sea District Tanner crab fishery, a legal Tanner crab pot is no more than 10 ft long by 10 ft wide by 42 in high. It has rigid tunnel eye openings that individually are no more than 3 in in one dimension with tunnel eye opening perimeters that individually are more than 36 in (91.4 cm). Or, a legal Tanner crab pot is no more than 10 ft long by 10 ft wide by 42 in high that tapers inward from its base to a top that consists of one horizontal opening of any size. A complete description of statewide Tanner crab gear requirements is in 5 AAC 35.050 LAWFUL GEAR FOR TANNER CRAB (pg. 169, CSFRB). All crab pots must have at least one-third of one vertical surface of the pot composed of not less than seven and three-quarters inch stretched mesh webbing. Or, they must have at least four circular escape rings (with inside diameter ≥ five inches each) installed in the vertical plane to permit the escapement of undersized Tanner crabs as required by 5 AAC 35.525 LAWFUL GEAR FOR REGISTRATION AREA J (b) (1) (pg. 195, CSFRB). All pots must also be equipped with a biodegradable escape mechanism as described in 5 AAC 39.145 ESCAPE MECHANISM FOR SHELLFISH AND BOTTOMFISH POTS (pg. 44, CSFRB).

Vessel Registration, Tank, Pre-Tank, and Gear Inspections

Area J is a nonexclusive registration area. A Tanner crab vessel validly registered for a nonexclusive registration area may not be used to take Tanner crabs in a superexclusive registration area. However, it may register to fish in other nonexclusive registration areas during the same registration year as provided in 5 AAC 35.005 REGISTRATION AREAS ESTABLISHED (c) (pg. 164, CSFRB).

A vessel must fulfill registration requirements with CFEC listed under 5 AAC 39.120 REGISTRATION OF COMMERCIAL FISHING VESSELS (pg. 30, CSFRB). In addition, a

vessel used to take Tanner crabs in the Bering Sea District must first obtain a registration certificate from ADF&G as specified in 5 AAC 35.020 TANNER CRAB AREA REGISTRATION (pg. 165, CSFRB). The registration year for Tanner crab vessels is August 1-July 31. In order for a registration to be valid, a vessel must first have all holds and/or live tanks inspected by an ADF&G representative as specified in 5 AAC 35.030 INSPECTION REQUIREMENTS (pg. 166, CSFRB). Hold inspections are required to insure that vessels are not in possession of crabs prior to the start of a fishery. Vessels intending to participate in the directed Bering Sea Tanner crab fishery must register and have their holds inspected in Dutch Harbor, Akutan, or King Cove according to provisions of 5 AAC 35.555 INSPECTION REQUIREMENTS FOR REGISTRATION AREA J (a) (pg. 199, CSFRB). ADF&G also provides tank inspections in the Pribilof Islands at St. Paul harbor. Inspections are conducted 24 hours prior to the start of the season. Tank inspections for vessels harvesting Tanner crabs in conjunction with red king crabs in the Bristol Bay Registration Area T fishery begin 30 hours prior to the fishery opening as specified in 5 AAC 34.840 REGISTRATION AREA T INSPECTION POINTS AND REQUIREMENTS (b) (pp. 153-154, CSFRB).

In addition to the normal 24-hour tank inspection window, pre-tank and gear inspections are available to facilitate gear loading and expedite the registration validation process. ADF&G staff in all tank inspection ports (except St. Paul) inspect holding tanks and gear on vessels up to seven days prior to the normal tank inspection period. If all pots on the vessel at the time of the pre-tank inspection comply with registration area gear requirements, and all tanks are confirmed to contain no crabs, a pre-tank inspection certificate is issued to the operator of the vessel. Leaving port or placing gear on the vessel that does not comply with area registration gear requirements invalidates the pre-tank inspection certificate, in which case the vessel is required to undergo a regular tank inspection during the 24-hour tank inspection window. Vessels may change dock locations within the same port by first notifying the local ADF&G representative and providing their departure time, arrival time, and route of travel. Contact with a local ADF&G representative must be made prior to location change.

Operators or interim-use cardholders from vessels that have received a pre-tank and gear inspection certificate may proceed to a pre-designated "Quick Registration" signing location to have their registration validated. They must provide the ADF&G representative at that location with the completed pre-tank certificate, a **current** interim-use permit card for Bering Sea Tanner crab (T09Q or T91Q), and the vessel registration, issued when buoy tags were purchased. Quick Registration signing locations are announced by news release and during pre-tank inspections. Once a vessel's registration has been validated, the vessel is free to leave port and proceed to the fishing grounds. The pre-tank inspection and Quick Registration validation process greatly expedites tank inspections and usually enables the majority of the fleet to complete the registration validation process and depart port within one hour of the start of the regular tank inspection period.

During the tank inspection period, USCG representatives may review vessel stability requirements and certified letters of stability to ensure that the number of pots carried by a vessel does not exceed the vessel's stability requirements. Questions regarding USCG stability checks should be addressed to: Lieutenant Bob D. Beck Jr., Supervisor, Marine Safety Detachment, USCG, Dutch Harbor, (907) 581-3466

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Operation of Other Gear

According to provisions of 5 AAC 35.528 OPERATION OF OTHER GEAR IN REGISTRATION AREA J (pg. 198, CSFRB), "a person or vessel that operates pot or longline gear in a commercial, subsistence, personal use, or sport fishery or trawl gear in a fishery other than a directed pollock fishery, in that portion of the Bering Sea District of Registration Area J north of 55° 30' N lat. and east of 164° W long. during the 30 days immediately before the opening of the commercial *C. bairdi* Tanner crab season, may not participate in the commercial *C. bairdi* Tanner crab fishery. A person or vessel that operates trawl gear in a directed pollock fishery in that portion of the Bering Sea District of Registration Area J north of 55° 30' N lat. and east of 164° W long. during the 14 days immediately before the opening of the commercial *C. bairdi* Tanner crab season, may not participate in the commercial *C. bairdi* Tanner crab fishery except a trawl catcher vessel that delivers to an offshore processor or had 100% federal groundfish onboard observer coverage during the 14 days immediately before the scheduled opening date of the commercial *C. bairdi* Tanner crab season.

"If the Bristol Bay red king crab fishery does not open, a person or vessel that operates pot or longline gear in a commercial, subsistence, personal use, or sport fishery or trawl gear in a fishery other than a directed pollock fishery, in the Bering Sea District of Registration Area J during the 30 days immediately before the opening of the commercial *C. bairdi* Tanner crab season, may not participate in the commercial *C. bairdi* Tanner crab fishery. A person or vessel that operates trawl gear in a directed pollock fishery in the Bering Sea District of Registration Area J during the 14 days immediately before the opening of the commercial *C. bairdi* Tanner crab season, may not participate in the commercial *C. bairdi* Tanner crab fishery except a trawl catcher vessel that delivers to an offshore processor or had 100% federal groundfish onboard observer coverage during the 14 days immediately before the scheduled opening date of the commercial *C. bairdi* Tanner crab season…."

Landing Requirements

The landing deadline for a fishing vessel participating in the Tanner crab fishery in the Eastern Subdistrict is 24 hours following the fishery closure. However, an owner or the owner's agent of a vessel delivering to King Cove or ports east, may request additional time to deliver Tanner crabs by contacting a representative of the ADF&G office in Dutch Harbor. A reasonable amount of additional time will be provided to allow the vessel to proceed directly to the processing location. Additional information concerning landing requirements for Tanner crabs in the Bering Sea can be found in 5 AAC 35.556 LANDING REQUIREMENTS FOR AREA J (pg. 199, CSFRB).

For vessels harvesting Tanner crabs during the Bristol Bay Registration Area T red king crab fishery, the landing deadline is 30 hours after closure of Area T. All requirements, as outlined in 5 AAC 34.841 LANDING REQUIREMENTS FOR REGISTRATION AREA T (pp. 154-155, CSFRB), apply to vessels harvesting Tanner crabs during the Bristol Bay Registration Area T red king crab fishery.

Vessels desiring to place pot gear at a dry storage facility en route to a landing destination east of King Cove may make special arrangements with ADF&G at the time the vessel requests

additional transit time and checks out of the Bering Sea District. In addition to vessel location, number of crabs on board, processing destination, and estimated time of arrival, the vessel operator will also be required to provide the estimated time of arrival and departure from the dry storage facility.

Pot Storage Requirements

In the Bering Sea District, Tanner crab pots may be stored in waters of 25 fathoms or less if all doors are secured open with bait and bait containers removed. In the Eastern Subdistrict north of 57º N lat., south of 58º N lat., east of 166º W long., and west of 164º W long., pots may be stored at any depth from January 1 through December 31. In years when there is a BBRKC fishery, pots may be stored in waters of the Eastern Subdistrict east of 166° W long. in waters deeper than 25 fathoms for 10 days before the directed Tanner crab fishery. In years when the BBRKC fishery does not open, preseason gear storage in waters deeper than 25 fathoms is not allowed. Pot storage requirements specific to the Tanner crab fishery in the Bering Sea are found in 5 AAC 35.527 TANNER CRAB POT STORAGE REQUIREMENTS FOR REGISTRATION AREA J (4)(A) and (B) (pg. 197, CSFRB). Preseason pot storage is precluded from the Bristol Bay king crab management area between 166° and 168° W long. to reduce conflicts between stored crab gear and the rock sole trawl fleet operating in that area. Pots may be stored deeper than 25 fathoms within the Eastern Subdistrict for up to seven days following the closure of the commercial Tanner crab fishery according to 5 AAC 35.052 TANNER CRAB GEAR STORAGE REQUIREMENTS (a)(2)(A) (pp. 169-170, CSFRB).

Legal Size Limit

Male Tanner crabs and hybrid Tanner crabs conforming to the identification criteria described in 5 AAC 35.521 (a) IDENTIFICATION OF BERING SEA TANNER CRAB (pg. 195, CSFRB) must be 140 mm (5½ in) or greater in shell width to be retained according to 5 AAC 35.060 SIZE LIMIT FOR TANNER CRAB (pg. 172, CSFRB). All female and undersized male crabs must be immediately returned unharmed to the sea, as outlined in 5 AAC 35.065 FEMALE AND UNDERSIZE TANNER CRAB (pg. 172, CSFRB).

HARVEST STRATEGY

The harvest strategy for Bering Sea Tanner crabs was developed in accordance with provisions set out in 5 AAC 35.080 HARVEST STRATEGY (pp. 172-173, CSFRB) and is outlined under 5 AAC 35.508 EASTERN SUBDISTRICT *C. BAIRDI* TANNER CRAB HARVEST STRATEGY (pp. 190-191, CSFRB). BOF adopted this harvest strategy at their March 1999 meeting as part of a comprehensive Bering Sea Tanner crab-rebuilding plan.

This harvest strategy specifies a minimum biological threshold of 21.0 million pounds of mature female biomass and a minimum GHL threshold of 4.0 million pounds as determined by the annual NMFS trawl survey of the eastern Bering Sea. No commercial fishery is prosecuted

when either the mature female biomass or the GHL are below these minimum threshold levels. This includes the incidental harvest of Tanner crabs during the BBRKC fishery and to any directed harvest of Tanner crabs in waters of the Eastern Subdistrict east of 168° W long.

When the minimum GHL threshold is met and the mature female biomass is between 21.0 million and 45.0 million pounds, the GHL will be no more than 10% of molting mature male abundance or 50% of the exploitable legal size male abundance, whichever is less. When the mature female biomass is 45.0 million pounds or greater, the GHL will be no more than 20% of molting mature male abundance or 50% of the exploitable legal size male abundance, whichever is less.

If the fishery did not open because the female biomass threshold requirement was not met, the fishery may reopen the following season if the GHL is at least 8.0 million pounds, but only half the GHL may be harvested. If the fishery remains closed because the increased GHL threshold requirements are not met, the fishery may open the following season if the GHL is 4.0 million pounds or greater. These requirements were put in place to guard against an anomaly in the eastern Bering Sea trawl survey. Separate GHLs are calculated for the areas east and west of 168° W long. If the GHL in either area is too low to manage effectively, the fishery can be closed in that area.

It should be noted that two errors exist in 5 AAC 35.508 EASTERN SUBDISTRICT *C. BAIRDI* TANNER CRAB HARVEST STRATEGY (pp. 190-191, CSFRB). Item (a)(2) should read: ***A guideline harvest level of at least 4,000,000 pounds.*** Item (e) should read: If the commercial fishery in the Eastern Subdistrict is not opened because it did not meet the threshold requirement of (a) of this section, the fishery will reopen the following season only if an analysis of preseason survey data indicates that the ***guideline harvest level, as computed in (c) of this section, contains*** 8,000,000 pounds or more of exploitable legal size male abundance, and only half of the season's calculated guideline harvest level may be harvested. If the fishery remains closed for an additional season only because the increased guideline harvest level threshold requirements of this subsection are not met, the fishery may open the following season if the threshold requirements of (a) are met.

For the purposes of this harvest strategy, "exploitable legal size male abundance" means the estimated abundance of 100% of new-shell and 32% of old-shell male *C. bairdi* Tanner crabs that are more than 140 mm (5½ in) carapace width (CW) including the spines. "Mature female crab biomass" means the estimated biomass of female *C. bairdi* Tanner crabs that are more than 79 mm CW. "Molting mature male abundance" means the estimated abundance of 100% of new-shell and 15% of old-shell male *C. bairdi* Tanner crabs greater than 112 mm CW.

FISHERIES MANAGEMENT AND VOLUNTEER CATCH REPORTING

The Tanner crab fishery in the Eastern Subdistrict is managed based on inseason voluntary catch reports from participating vessel operators. The ADF&G staff in Dutch Harbor process these reports sent via marine satellite telex or single side band radio. Vessel operators report number of pots hauled and number of legal crabs harvested for a predetermined reporting period. The

reporting period time interval (every 12 or 24 hours) and reporting times are predetermined based on the number of vessels participating and the size of the GHL. Inseason management allows the fishery manager to base management decisions on actual, real-time fishery performance and weather conditions. Inseason information is used to monitor the daily harvest and to calculate a daily catch rate used to project the date and time of the fishery closure. Once determined, the closure is announced to the fishing fleet over single side band radio (frequency 4125 kHz) and faxed or emailed to all major processors and industry groups. All vessel operators are asked to participate in voluntary catch reporting at the time of tag purchase, registration, and/or tank inspection. Contact phone numbers and email addresses for regional ADF&G, FWP, and NMFS offices are listed in Appendix A of this report.

Vessels harvesting Tanner crabs incidentally during the BBRKC fishery are asked to report numbers of Tanner crabs harvested in conjunction with their daily red king crab catch and effort report.

During vessel offloading at shore based processors, ADF&G biologists board vessels and sample (measure) crabs and collect information from the vessel operator on soak time, numbers of pots fished each day, and areas fished. This information is used along with survey and observer collected data for both research and management purposes.

GUIDELINE HARVEST LEVEL AND OUTLOOK FOR THE 2001 FISHERY

Results from the 2000 NMFS eastern Bering Sea trawl survey indicated the overall abundance of Tanner crabs increased slightly from levels observed in 1999 (Stevens et al. 2000). However, the population remained below the MSST and the fishery did not open in 2000. Results from the 2001 NMFS survey will be used to determine the status of the 2001 fishery.

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Table 1. Commercial harvest statistics, by season, for the Bering Sea Tanner crab fishery, 1969-2000.

Year	Number of Vessels	Number of Landings	Number of Crab[a]	Harvest[a] (pounds)	Number of Pots Registered	Number of Pots Pulled	CPUE[b]	Deadloss (pounds)
1969	NA	131	353,300	1,008,900		29,800	12	NA
1970	NA	66	482,300	1,014,700		16,400	29	NA
1971	NA	22	61,300	166,100		7,300	8	NA
1972	NA	14	42,061	107,761		4,260	10	NA
1973	NA	44	93,595	231,668		15,730	6	NA
1974	NA	69	2,531,825	5,044,197		22,014	115	NA
1974/75	28	80	2,773,770	7,028,378		38,462	72	NA
1975/76	66	304	8,956,036	22,358,107		141,206	63	NA
1976/77	83	541	20,251,508	51,455,221		297,471	68	NA
1977/78	120	861	26,350,688	66,648,954		516,350	51	218,099
1978/79	144	817	16,726,518	42,547,174		402,697	42	76,000
1979/80	152	804	14,685,611	36,614,315	40,273	488,434	30	56,446
1981	165	761	11,845,958	29,630,492	42,910	559,626	21	101,594
1982	125	791	4,830,980	11,008,779	36,396	490,099	10	138,159
1983	108	448	2,286,756	5,273,881	15,255	282,006	8	60,029
1984	41	134	516,877	1,208,223	9,851	61,357	8	5,025
1985	44	166	1,283,474	3,151,498	15,325	104,707	12	14,096
1986	NO COMMERCIAL FISHERY							
1987	NO COMMERCIAL FISHERY							
1988	98	248	897,059	2,210,394	38,765	112,334	8	10,724
1989	109	359	2,907,021	7,012,965	43,607	184,892	16	34,664
1990	179	1,032	10,717,924	24,549,299	46,440	711,137	15	87,475
1990/91	255	1,756	16,608,625	40,081,555	75,356	883,391	19	210,769
1991/92	285	2,339	12,924,034	31,796,381	85,401	1,244,633	10	279,741

-Continued-

Table 1. (Page 2 of 2)

Year	Number of Vessels	Number of Landings	Number of Crab[a]	Harvest[a] (pounds)	Number of Pots Registered	Number of Pots Pulled	CPUE[b]	Deadloss (pounds)
1992/93	294	2,084	15,265,880	35,130,866	71481	1,200,885	13	343,955
1993/94	296	862	7,235,498	16,891,320	116,039	576,464	13	258,389
1994	183	349	3,351,639	7,766,886	38,670	249,536	13	132,780
1995	196	256	1,877,303	4,233,061	40,827	247,853	8	44,508
1996[c]	196	347	734,296	1,806,077	68,602	149,289	5	14,608
1997	NO COMMERCIAL FISHERY							
1998	NO COMMERCIAL FISHERY							
1999	NO COMMERCIAL FISHERY							
2000	NO COMMERCIAL FISHERY							

[a]Deadloss included.

[b]Defined as catch of legal crab per pot.

[c]Includes incidental catch with Bristol Bay red king crab and Tanner crab directed fishery totals.

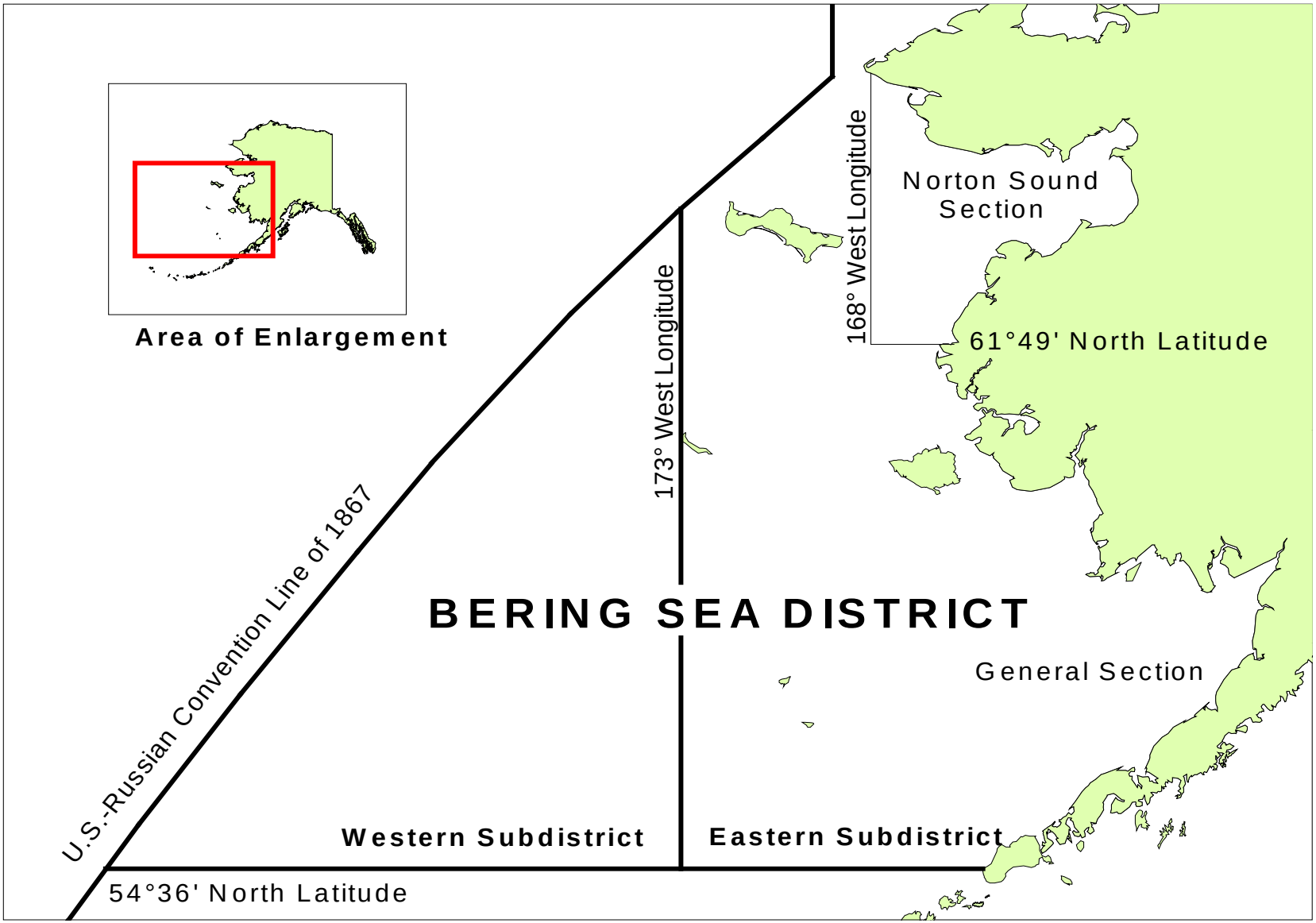

Figure 1. Subdistricts and sections of the Bering Sea District of Tanner crab Registration Area J.

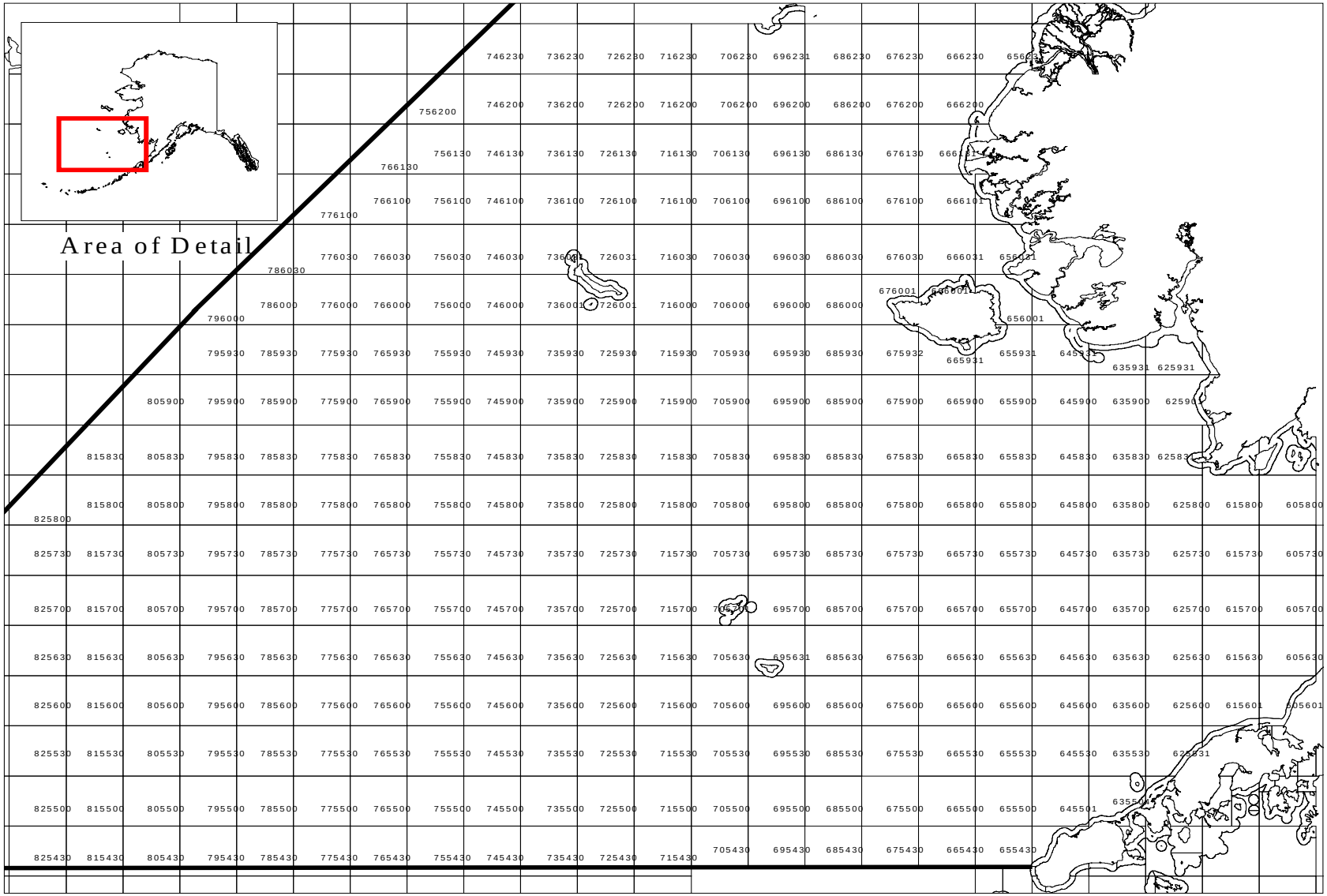

Figure 2. Statistical areas of the Bering Sea District of Tanner crab Registration Area J.

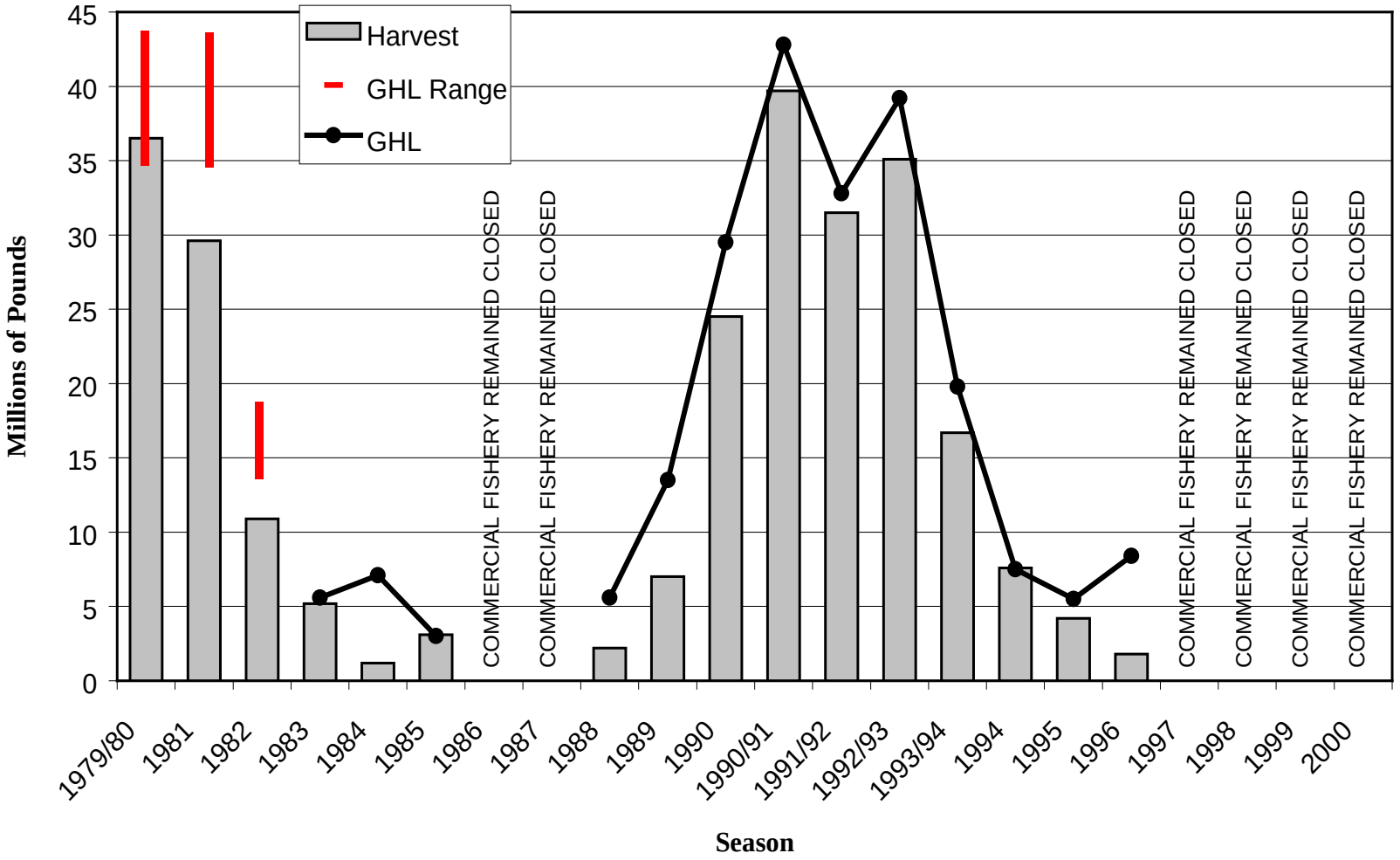

Figure 3. Bering Sea Tanner crab harvest and guideline harvest levels, 1979-2000.

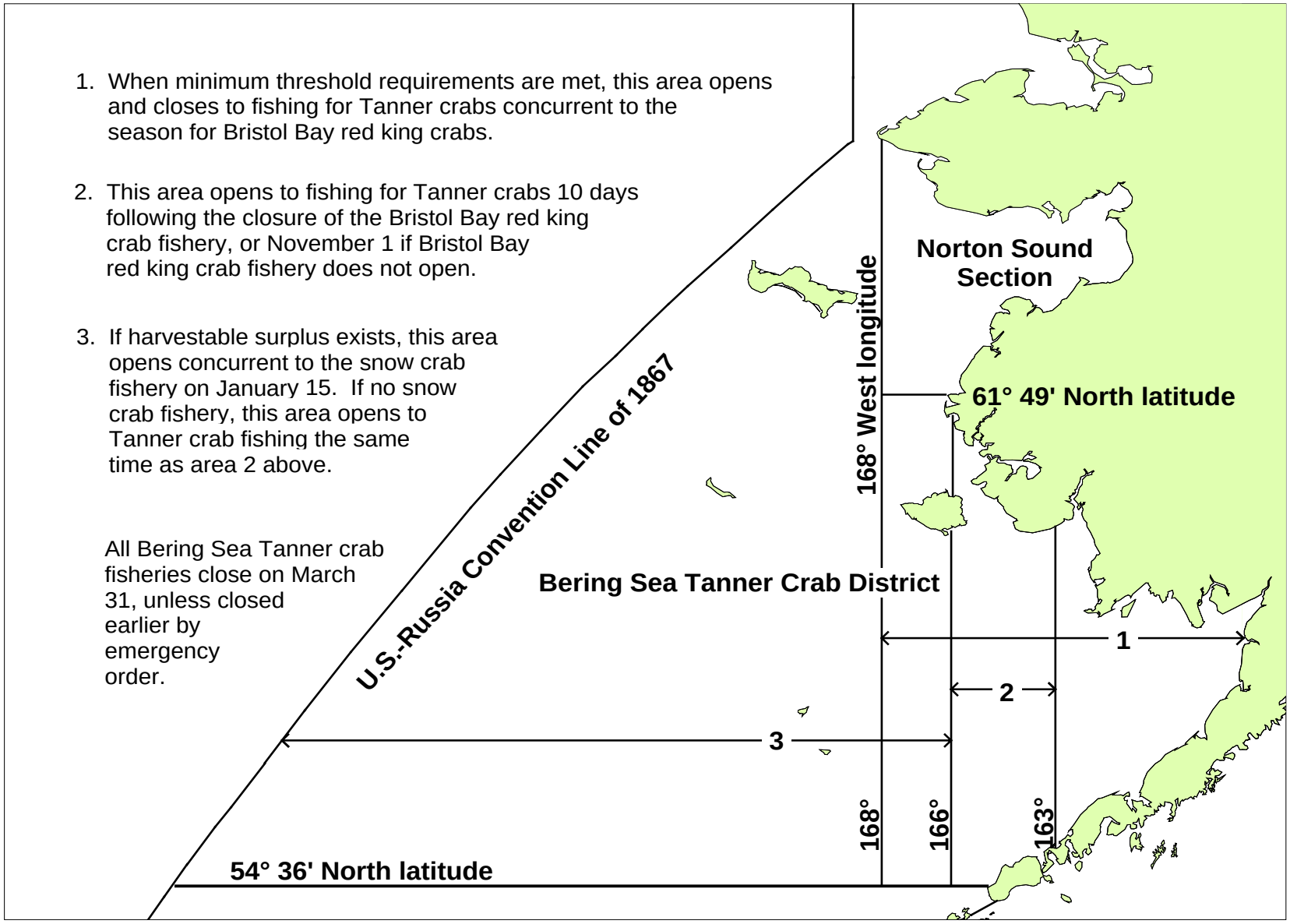

Figure 4. Areas open to fishing for Tanner crabs in the Bering Sea District.

APPENDIX

Appendix A. List of contact persons, by agency and location.

Alaska Department of Fish and Game — web site: http://www.cf.adfg.state.ak.us/region4/shellfsh/shelhom4.htm

Dutch Harbor office

Mail address:	PO Box 920587 Dutch Harbor, AK 99692	*Physical address:*	2315 Airport Beach Rd., 2nd Fl. Dutch Harbor	Phone: (907) 581-1239 FAX : (907) 581-1572

Forrest Bowers	Bering Sea/Aleutian Islands Area Biologist	forrest_bowers@fishgame.state.ak.us
Rance Morrison	Bering Sea/Aleutian Islands Shellfish Observer Program Coordinator	rance_morrison@fishgame.state.ak.us
Amy Gilson	Bering Sea/Aleutian Islands Buoy Tag Sales Administrator	amy_gilson@fishgame.state.ak.us

Kodiak office

Mail address:	211 Mission Rd. Kodiak, AK 99615	*Physical address:*	211 Mission Rd, 2nd Fl. Kodiak	Phone: (907) 486-1840 FAX : (907) 486-1824

Wayne Donaldson	Westward Region Shellfish/Groundfish Biologist	wayne_donaldson@fishgame.state.ak.us
Dave Jackson	Kodiak, Chignik, Alaska Peninsula Area Shellfish/Groundfish Biologist	dave_jackson@fishgame.state.ak.us
Mike Ruccio	Kodiak, Chignik, Ak. Pen. Assistant Area Shellfish/Groundfish Biologist	mike_ruccio@fishgame.state.ak.us

Division of Fish and Wildlife Protection — web site: **hhtp://www.dps.state.ak.us**

Dutch Harbor office

Mail address:	PO Box 920848 Dutch Harbor, AK 99692	*Physical address:*	2315 Airport Beach Rd., Suite 106 Dutch Harbor	Phone: (907) 581-1432 FAX : (907) 581-1407

Donna Edmond	Sargent	donna_edmond@fishgame.state.ak.us

Kodiak office

Mail address:	211 Bartell Kodiak, AK 99615	*Physical address:*	211 Bartell, 2nd Fl. Kodiak	Phone: (907) 486-4761 FAX : (907) 486-1707

Joanna Roop	Detachment Lieutenant	joanna_roop@dps.state.ak.us

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National Marine Fisheries Service web site: **http://www.fakr.noaa.gov/**

Dutch Harbor enforcement office

Mail address:	PO Box 920368 Dutch Harbor, AK 99692	*Physical address:*	2315 Airport Beach Rd., Suite 103 Dutch Harbor	Phone: (907) 581-2061 FAX : (907) 581-2064

Chuck Raterman	Enforcement Officer	Charles.Raterman@noaa.gov

Kodiak enforcement office

Mail address:	1211 Gibson Cove Rd Kodiak, AK 99615	*Physical address:*	Gibson Cove Complex Gibson Cove, Kodiak	Phone: (907) 486-3298 FAX : (907) 486-6868

Ken Hansen	Fisheries Enforcement Agent	Kenneth.Hansen@noaa.gov

United States Coast Guard web site: **http://www.dot.gov/dotinfo/uscg**

Dutch Harbor office

Mail address:	PO Box 920446 Dutch Harbor, AK 99692	*Physical address:*	2387 Airport Beach Rd. Dutch Harbor	Phone: (907) 581-3466 FAX : (907) 581-3468

Bob D. Beck Jr.	Lieutenant, Supervisor	Marine Safety Detachment	bbeck@cgalaska.uscg.mil